

APPLICATION
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TITLE: SMOKING ACCESSORY
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SMOKING ACCESSORY

TECHNICAL FIELD

[0001] This invention relates to a cigarette smoking accessory, and more particularly to a cigarette snuffer.

BACKGROUND

[0002] Commercially available, pre-rolled cigarettes are generally of a standard size, having approximately the same diameter and length. A person smoking a cigarette often does not have the time, or the desire, to smoke the entire cigarette and will discard a partially used cigarette. With non-smoking venues becoming more and more common, smokers are often required to smoke outdoors, where ashtrays and other suitable means of disposing of a finished or partially used cigarette are not available. Cigarette snuffers for extinguishing lit cigarettes are available in various configurations, including portable snuffers for use with a single cigarette and snuffers combined with ashtrays. Cigarette lighters are also available in various shapes and forms, and disposable lighters using a gas fuel, *e.g.*, butane, are widely used.

SUMMARY

[0003] This invention relates to a cigarette smoking accessory, and more particularly to a cigarette snuffer adapted to connect to a cigarette lighter. In general, in one aspect, the invention features an apparatus for extinguishing and containing a cigarette. The apparatus includes a container and a clip. The container has an open end, a hollow interior having a substantially constant interior diameter, and a closed end. The open end is configured to receive a cigarette, the interior is configured to contain a cigarette and the container is configured to extinguish a cigarette. The clip is connected to the container, and includes a first portion grasping the exterior of the cylindrical container, and a first and a second resilient arm extending from the first portion configured to grasp a cigarette lighter. The first arm is bowed toward the second arm, and the second arm is bowed toward the first arm. A bottle opener is connected to the exterior of the container.

[0004] In general, in another aspect, the invention features an apparatus for extinguishing and containing a cigarette, the apparatus including a container and a first and a second resilient arm, each arm extending from the container. The container has an open end, a hollow interior

having a substantially constant interior diameter, and a closed end. The open end is configured to receive a cigarette, the interior is configured to contain a cigarette and the container is configured to extinguish a cigarette. The two resilient arms are configured to grasp a cigarette lighter, the first arm bowed toward the second arm and the second arm bowed toward the first arm. A bottle opener is connected to the exterior of the container.

[0005] Embodiments of the invention can include one or more of the following. The apparatus can further include a can tab opener connected to the exterior of the cylindrical container. The container can be a cylindrical container, and the interior diameter of the container can be such that a lit cigarette will lodge in the interior of the cylindrical container and self-extinguish. The clip and/or the container can be formed from a heat-resistant plastic, for example, a glass filled Abs plastic.

[0006] The arms of the clip can exhibit a restoring force upon being forced apart from one another, such that a cigarette lighter placed between the arms while being forced apart is firmly grasped by the arms once released. The container can be connected to the clip by a snug-fit connection. The first portion of the clip can include two or more grooves on an exterior of the first portion adapted to receive fingers of a user of the apparatus.

[0007] The apparatus can further include at least one or more of the following: a pen tip connected to the container; a light connected to the container; a laser-emitting device connected to the container; a releasable clip connected to the container; a magnet connected to the container; an adhesive connected to the container; a magnet connected to the clip; an adhesive connected to the clip; and a belt clip connected to the clip.

[0008] Implementations of the invention can realize one or more of the following advantages. The smoking accessory clips to commercially available, disposable cigarette lighters, thus making the smoking accessory conveniently available to a person smoking a cigarette who just used their cigarette lighter to light the cigarette. The smoking accessory can be used to both extinguish a cigarette, and contain the cigarette until either the person wishes to relight and resume smoking the cigarette, or until a suitable trash receptacle is available to discard of the cigarette. A bottle opener and/or a can-tab opener can be integrated into the smoking accessory, providing additional functions that are often required at the same time as smoking a cigarette, for example, to consume a beverage and smoke a cigarette while on a "coffee break" during one's work day. The smoking accessory can be adorned with decorative

elements, including logos for advertising and promotional purposes. Additional features can be easily added, making the smoking accessory multi-functional. For example, including a can-tab opener allows a user to open beverage cans, without risk of ruining the user's manicure or chipping the user's fingernails, which are typically used to pry back can-tabs.

[0009] The details of one or more embodiments of the invention are set forth in the accompanying drawings and the description below. Other features, objects, and advantages of the invention will be apparent from the description and drawings, and from the claims.

DESCRIPTION OF DRAWINGS

[0010] FIG. 1A shows a cigarette poised to be inserted into a smoking accessory.

[0011] FIG. 1B shows a cross-section of the cylindrical container of the smoking accessory of FIG. 1A.

[0012] FIG. 2 shows a smoking accessory connected to a cigarette lighter.

[0013] FIG. 3 shows a side view of the smoking accessory shown in FIGS. 1 and 2.

[0014] FIG. 4 shows a bottom-end view of the smoking accessory shown in FIG. 3.

[0015] FIG. 5 shows a top-end view of the smoking accessory shown in FIG. 3.

[0016] Like reference symbols in the various drawings indicate like elements.

DETAILED DESCRIPTION

[0017] FIG. 1A shows a smoking accessory 100 including a container 110 and a clip 115. The container 110 shown is cylindrical, having a circular shaped exterior and interior cross-section. However, the container 110 can be formed in a different shape, and can have an exterior cross-section different from the interior cross-section. For example, the exterior cross-section can be a square shape and the interior cross-section can be a circular shape.

[0018] The cylindrical container 110 has an open end 120 and a closed end 125. The open end 120 is configured to receive a cigarette, such as the cigarette 130 shown. The cylindrical container 110 is a sufficient length and interior diameter to contain standard, commercially available cigarettes, and can be, for example, approximately 2.96 inches long and 0.32 inches in diameter, which is slightly longer and wider than a typical commercially available cigarette, having dimensions of approximately 3.25 inches in length and 0.30 inches in width.

[0019] The interior of the cylindrical container 110 is hollow, and the interior diameter is substantially constant. The exterior of the cylindrical container 110 can be smooth with a

substantially constant exterior diameter, or can be ridged, or include other decorative elements. The cylindrical container 110 can have thin walls, for example, the walls can be approximately 0.03 inches thick.

[0020] The interior of the closed end 125 can be a convex surface 127 as shown in FIG. 1B, extending toward the open end 120 of the cylindrical container 110.

[0021] The clip 115 includes at least two arms configured to grasp a cigarette lighter. In an embodiment shown in FIGS. 1A and 2, the clip 115 includes a first arm 145 and a second arm 150, which are shown in FIG. 2 grasping a cigarette lighter 155. Referring to FIGS. 4 and 5, a top view (FIG. 5) and end view (FIG. 4) of the smoking accessory 100 are shown. The arms 145, 150 extend from a cylindrical portion 160 of the clip 115, which surrounds at least a portion of the cylindrical container 110. In the embodiment shown, the cylindrical portion 160 of the clip 115 embraces approximately three quarters of the exterior of the cylindrical container 110, and then opens into the first arm 145 and second arm 150, which are bowed in opposite directions to one another: the first arm 145 being bowed toward the second arm 150, and the second arm 150 being bowed toward the first arm 145. The bowed shape of the arms 145, 150 creates a suitably shaped void 170 where a conventional cigarette lighter 155 can be placed.

[0022] In another embodiment, each arm 145, 150 can be replaced by two or more narrower arms, for example, one above the other on each side of the clip 115. In one embodiment, the clip 115 can include decorative features, such as holes 165 that allow the cylindrical container 110 to show through, which can be desired if the clip 115 and container 110 are made of different colored materials. The holes 165 can also provide a gripping surface for a user, while holding onto the smoking accessory 100.

[0023] In one embodiment, as shown in FIG. 1A, the cylindrical container 110 incorporates a bottle opener 135 toward the open end 120 of the container 110. The bottle opener 135 is configured to pry bottle caps off of typical, commercially available bottled beverages, for example, soda and beer bottles. The bottle opener 135 can be a separate component that is affixed to the cylindrical container 110, for example, with one or more screws, or in any convenient manner, or can be an integral part of the cylindrical container 110, as shown in FIG. 1A.

[0024] In another embodiment, the cylindrical container 110 can incorporate a can-tab opener 140, that can be used to pull back a tab on a typical, commercially available canned

beverage, for example, soda or beer cans. The can-tab opener 140 can be used in place of one's fingers, thus reducing the risk of a user chipping a finger nail or ruining a manicure while opening a beverage can. In one embodiment, the can-tab opener 140 can be made from, or coated with, a magnetic material, making it easier to grasp and pull-back a metallic can tab.

[0025] The cylindrical container 110 is formed from a rigid material, such as a heat resistant plastic (*e.g.*, a glass filled Abs plastic), or a metal (*e.g.*, aluminum, zinc, brass, copper). The cylindrical container 110 can be manufactured using plastic injected molding, if forming from a plastic, or could be milled, if forming from a metal. Other manufacturing techniques can be used, depending on the material selected.

[0026] If the cylindrical container 110 includes a bottle opener 135 and/or a can-tab opener 140, the openers 135, 140 can be formed from the same material as the body of the container 110, or can be formed all or in part from a different (*e.g.*, harder) material, such as a metal, if a plastic is being used for the body. The can-tab opener 140, for example, can be formed from, or be coated with, a magnetic material, making it easier to grasp and pull back a can tab.

[0027] The clip 115 is formed from a resilient material, such that a restoring force will tend to return the arms 145, 150 to their original position if they are forced apart from one another, for example, to insert a cigarette lighter 155 in the void 170 created between the arms 145, 150 while in their original position. The clip 115 can be formed from a plastic (*e.g.*, a glass filled Abs plastic), or a flexible metal (*e.g.*, aluminum, zinc, brass, copper).

[0028] The cylindrical container 110 is connected to the clip 115. In one embodiment, the cylindrical container 110 is connected to the clip 115 by a snug fit connection. The cylindrical portion 160 of the clip 115 is formed having an interior diameter just slightly greater than the exterior diameter of the cylindrical container 110, such that when the cylindrical container 110 is slid into the cylindrical portion 160 of the clip 115, or the cylindrical portion 160 of the clip 115 is expanded (*e.g.*, pulled apart) and then snapped onto the cylindrical container 110, the two are held firmly together. Other means can be used to hold together the cylindrical container 110 and the clip 115 including, for example, screws, a threaded connection (*i.e.*, the cylindrical container threads into the cylindrical portion 160 of the clip 115), glue, solder, and the like.

[0029] In one embodiment, the cylindrical container 110 and the clip 115 are formed as one, uniform item, that is, the arms 145, 150 extend directly from the cylindrical container 110. In another embodiment, two cylindrical containers 110 are included in the smoking accessory 100. For example, a second cylindrical container can be positioned between a first cylindrical container and the clip 115. Alternatively, a second cylindrical container can be positioned adjacent to the first cylindrical container, such that the cylindrical portion 160 of the clip extends around the exterior of both cylindrical containers.

[0030] The smoking accessory 100 can be clipped to commercially available cigarette lighters, including, for example, BIC® lighters, available from Société Bic of France. The arms 145, 150 of the clip 115 can be held slightly apart by a user, by applying an outward force to each of the arms 145, 150, while a lighter 155 is slipped in between the arms 145, 150. The user releases the arms 145, 150, and a restoring force exhibited by the arms 145, 150 will urge the arms 145, 150 back into their original position, and the arms 145, 150 will thereby firmly grasp the lighter 155. The arms 145, 150 are bowed such that the maximum distance between the arms 145, 150, as indicated by arrow 175 in FIG. 4, is less than a typical commercially available lighter. In one embodiment, the maximum distance between the arms 145, 150 is approximately 0.58 inches.

[0031] The smoking accessory 100 can be used to extinguish a cigarette 130. A user slides a lit cigarette 130 into the open end 120 of the cylindrical container 110, with the lit end of the cigarette 130 directed toward the closed end 125 of the container 110. The interior diameter of the cylindrical container 110 is such that a standard, commercially available cigarette can just fit within the container 110. The lit end of the cigarette 130 draws the available oxygen from the closed end 125 of the cylindrical container 110 into the cigarette 130, in an effort to stay ignited, causing the lit end of the cigarette 130 to expand slightly. The expansion of the lit end of the cigarette 130 causes the cigarette 130 to lodge within the cylindrical container 110, and thereby cuts off any further oxygen supply to the lit end of the cigarette, causing the cigarette 130 to extinguish. The cigarette is thereby snuffed out, without physically snuffing the cigarette 130, for example, for crushing the end of the cigarette 130 against the closed end 125 of the container 110, which could render the cigarette 130 unusable.

[0032] The extinguished cigarette 130 remains lodged in the cylindrical container 110 until removed by the user. The user can remove the cigarette 130 by tapping on the closed end

125 of the cylindrical container 110, or tapping the closed end 125 against a hard surface, for example, a table top. The tapping will jar the cigarette 130 loose, and the cigarette 130 can be removed by raising the closed end 125 of the cylindrical container 110 relative to the open end 120, and sliding the cigarette 130 out from the interior.

[0033] The bottle opener 135 can be used to pry bottle caps from standard, commercially available bottled beverages. The user positions the bottle opener 135 such that the lower lip 180 is underneath an edge of a bottle cap, and holding the lower lip 180 in place, rotates the smoking accessory 100 upwards, such that the upper lip 185 of the bottle opener 135 is pressing down on the top of the bottle cap. The user continues to rotate the smoking accessory 100 upwardly, until the cap is pried from the bottle.

[0034] The can tab opener 140 can be used to pull back tabs on standard, commercially available canned beverages. The user positions the can tab opener 140 such that the distal end hooks onto an edge of a can tab, and then pulls back the can tab using the can tab opener 140. The user can thereby avoid using his or her fingers and/or fingernails, and avoid risk of damaging his or her fingernails and/or fingernail polish.

[0035] In other embodiments, the smoking accessory 100 can include one or more additional features. The smoking accessory 100 can include a pen tip, pin light, and/or laser emitting device (*i.e.*, a pointer) integrated into the closed end 125 of the cylindrical container 110. The smoking accessory 100 can include a key chain holder, for example, one or more metal or plastic rings, attached to the cylindrical container 110, such that the smoking accessory 100 can be attached to a key ring including keys, or such that the smoking accessory 100 itself can be used as a key chain used to hold one or more keys. An air-freshener, such as a slow-release air freshener, can be incorporated into the cylindrical container 110. For example, an air freshener that is activated by heat to release an odor can be integrated into the closed end 125 of the cylindrical container 110, such that when an ignited cigarette is placed into the container 110, the heat emitted by the cigarette before extinguishing activates the air freshener.

[0036] In other embodiments, a magnet or an adhesive strip (*e.g.*, Velcro®) can be affixed to either the exterior of the cylindrical container 110, or the exterior of at least one of the arms 145, 150, so that the smoking accessory 100 can be affixed temporarily to a magnetic surface, *e.g.*, a fridge door, or to a fabric surface, *e.g.*, an office cubicle wall, using the magnet or adhesive, when the smoking accessory 100 is not in use. A releasable clip can be affixed to a

surface of the smoking accessory 100, so that the smoking accessory 100 can be clipped to any item with a suitable receiving means, for example, a belt loop, or a zipper-tab on a carrying case (e.g., laptop computer bag). A belt-clip can be affixed to the clip 115, such that the smoking accessory 100 can be clipped onto a belt, when not in use.

[0037] In one embodiment, the smoking accessory 100 can include an ergonomic grip, such that a user's fingers can comfortably grip the smoking accessory 100, for example, when using the lighter 155 to light a cigarette. The exterior of the cylindrical portion 160 of the clip 115 can include grooves configured to receive two or more typical human fingers, thereby forming a gripping surface. The exterior of the cylindrical container 110 can be similarly shaped, or the grip can be formed only on the clip 115.

[0038] In other embodiments, the smoking accessory 100 can include one or more decorative finishes. For example, as mentioned above, the clip 115 can include one or more holes 165, and the clip 115 can be formed from a material having a different color than the cylindrical container 110, such that the color of the container 110 shows through the holes 165. One or both of the clip 115 and the cylindrical container 110 can be formed from a glow in the dark material to allow easy retrieval of the smoking accessory 100 under dark or poorly lit conditions. For advertising or promotional purposes, brand names and trademarks can be applied to the exterior of either or both of the clip 115 and container 110. A high-end version of the smoking accessory 100 can be made with one or more genuine or synthetic jewels integrated into the exterior surface of one or both of the clip 115 and container 110. An image, finish or pattern can be impregnated onto the exterior surface of one or both of the clip 115 and the container 110, for example, an American flag image or a wood grain finish. For example, this can be done using a dipping process, whereby a plastic surface is dipped in a bath of an electrified solution that seals an image to the plastic.

[0039] A number of embodiments of the invention have been described. Nevertheless, it will be understood that various modifications may be made without departing from the spirit and scope of the invention. Accordingly, other embodiments are within the scope of the following claims.